



DEPARTMENT OF THE NAVY

NAVAL AIR SYSTEMS COMMAND
NAVAL AIR SYSTEMS COMMAND HEADQUARTERS
WASHINGTON DC 20361-0001

IN REPLY REFER TO

NAVAIRINST 5600.9B
AIR-4111
27 May 88

NAVAIR INSTRUCTION 5600.9B

From: Commander, Naval Air Systems Command

Subj: POLICIES AND RESPONSIBILITIES FOR MANAGEMENT AND COORDINATION OF
THE NAVAIR TECHNICAL MANUAL QUALITY ASSURANCE PROGRAM

Ref: (a) NAVAIRINST 5600.20B, Policy and responsibilities for the Naval
Air Systems Command Technical Manual Program
(b) Military Specification MIL-M-85337A(Navy), Manuals, Technical;
Quality Assurance Program; Requirements for
(c) Military Specification MIL-Q-9858A, Quality Program Requirements
(d) Military Specification MIL-M-23618G(AS), Manuals, Technical;
Periodic Maintenance Requirements: Preparation and Printing of
(e) NAVAIR 00-25-601, Cognizant Field Activity Procedures for
Management of Assigned Technical Manuals Applicable to In Service
Out-of-Production Category Aircraft/Systems/Components

1. Purpose. To supplement reference (a) by publishing specific policies and responsibilities for the management and coordination of the NAVAIR Technical Manual Quality Assurance Program (TMQAP).

2. Cancellation. This instruction supersedes NAVAIR Instruction 5600.9A of 19 October 1973. Since this is a major revision, changes are not indicated.

3. Scope. This instruction is issued as an integral part of the NAVAIR technical manual (TM) management program policy as defined by reference (a). It is mandatory that all TM procurements, either by contract, AIRTASK, or project order, stipulate reference (b) (or portions thereof) as a requirement. Reference (c) is a basic quality program requirement frequently incorporated in Department of Defense contracts. Reference (b) supplements reference (c) in order to specifically address quality assurance (QA) requirements unique to TM preparation. Reference (d) establishes QA functions for in-process reviews (IPR's) and validations and verifications to be performed at the technical manual cognizant field activities (TMCFA's). Reference (e) establishes a TMQAP requirement for TMCFA's. QA requirements for flight manuals, tactical manuals, and nuclear weapon manuals are subject to separate instructions.

4. Background. Reference (b) requires the contractor to establish a TMQAP to ensure development of technically accurate and complete TM's. The TMQAP will encompass all phases of the contractor's TM operation from source data collection, intermediate products, graphics and illustrations, validation, internal coordination, records through final product delivery, and acceptance. The intent of this requirement is to ensure that the contractor develops and maintains an effective and economical TM quality program.

Accordingly, the TMQAP must ensure the development and continued use by the contractor of adequate controls throughout all phases of TM development and production.

5. Policy

a. The TMQAP requirements as specified in reference (b) formulate the acceptance criteria for NAVAIR TM's. The QA functions as defined herein are the criteria used to evaluate and ascertain the preparing activity's compliance to specifications throughout the TM development and production process.

b. Milestones for supporting logistics pursuits such as logistic support analysis, tool and test equipment requirements, maintenance plans, and availability of hardware for validation must be programmed to assure availability for technical manual development.

6. Definitions

a. Guidance and Quality Planning Conference. The conferences are convened as two separate QA functions. The guidance conference is held to ensure the preparing activity's understanding of the TM specifications and other pertinent contract obligations. The quality planning conference is held to review the preparing activity's documented quality program, validation planning, and other related procedures of the TMQAP. This conference is usually convened during the early stages of the contract or TM development. The conference may be requested by either the preparing activity or the Government.

b. IPR. IPR's are scheduled formal government reviews of the TM accomplished at intermediate stages of development to evaluate the preparing activity's compliance to the TM specifications, the approved maintenance plan, and that TM's are written to the correctly configured hardware. Corrective action by the preparing activity is mandatory on valid discrepancies/deficiencies found during the IPR function prior to government acceptance of the TM's. The preparing activity may request an IPR or the Government may initiate an IPR at anytime during the life of the contract.

c. Adequacy Reviews. The process by which the Navy examines maintenance manuals and illustrated parts breakdown (IPB) simultaneously for adequacy in depth and scope of coverage; to review the preparation of IPB to ensure coverage is following the approved source, maintenance and recoverability (SM&R) codes; and to determine the adequacy of maintenance manuals prior to verification.

d. Validation. The process by which the contractor or cognizant preparing activity tests a manual for technical adequacy and accuracy. Validation is accomplished by actual performance of maintenance procedures checked against the system/equipment for which the manual was written, utilizing government approved support equipment. Theory and principles of operation, system/component description, SM&R codes, and schematic and wiring

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data shall be validated against engineering source data. Validation is normally conducted at the preparing activity or vendor's facility. In extenuating circumstances, the Government may authorize a combined validation/verification be conducted at an operational site. In this situation, the Navy assumes control of the validation/verification effort.

e. Verification. The process by which the Navy tests technical data to determine its adequacy and accuracy for operation and maintenance of equipment procured for operational units. Verification is normally conducted at an operational site with production equipment operated and maintained by fleet personnel. Verification is not an automatic QA function. Verification of TM's will be performed upon sufficient justification that the TM's are not accurate or useful in the fleet environment. The decision to verify a TM is based upon the preparing activity's performance and evaluation factors ascertained during IPR's and other associated QA requirements.

f. Quality Program Review (QPR). QPR's are conducted by the Government to assess the preparing activity's compliance to the QA requirements in the contract. The preparing activity's quality assurance program plan and/or validation plan are reviewed to gauge implementation and effectiveness. Quality records, validation records, and corrective action procedures are reviewed in detail. The QPR is primarily directed at the process and procedures of the QA system rather than concentrated efforts on the TM products.

7. Responsibilities

a. Naval Air Systems Command Headquarters (NAVAIRHQ). The NAVAIR Integrated Logistics Support Policy Branch (AIR-4111) is responsible for the overall management control and policy required to support the TMQAP.

b. Naval Air Technical Services Facility (NAVAIRTECHSERVFAC), the delegated Technical Manual Management Agency per reference (a), is responsible for the coordination and implementation of the TMQAP and will

(1) designate the QA requirements in reference (b) for incorporation in the technical manual contract requirement for acquisition;

(2) plan, coordinate, and chair the guidance/quality planning conference(s) and IPR's at the TM preparing activity;

(3) conduct on-site QPR's at the TM preparing activity to ascertain compliance with the TMQAP;

(4) assign a NAVAIRTECHSERVFAC verification coordinator to conduct TM verifications at an operational site with production equipment operated and maintained by fleet personnel; and

(5) coordinate and chair IPR's and verifications per references (d) and (e) on periodic maintenance requirements manuals.

c. Cognizant Administrative Services Component (CASC). The CASC, i.e., Air Force Plant Representative Office, Army Plant Representative Office, Defense Contract Administration Plant Representative Office, Naval Plant

Representative Office, is responsible for the administrative controls necessary to assure contractor compliance with the NAVAIR TMQAP contract requirements. The CASC will require the Government in-plant QA representative to

(1) participate in TM IPR's and witness contractor validation functions;

(2) monitor the contractor's corrective action procedures to ensure that deficiencies/discrepancies are purged from the TM's prior to government acceptance;

(3) monitor the contractor's purchase orders to vendors and sub-contractors for TM products to ensure the incorporation of reference (b) requirements such as IPR's and validation, as appropriate; and

(4) provide timely notice, via the Administrative Contracting Officer, to the NAVAIR Assistant Program Manager Logistics and the NAVAIRTECHSERVFAC project coordinator/data manager of significant factors that affect contract delivery schedule, funding, and TM quality.

d. TMCFA. The TMCFA will support the TMQAP per references (b) and (e) to ensure the adequacy and accuracy of TM's under their cognizance and will

(1) establish and implement a QA program appropriate for TM's under change or revision and during TM preparation process;

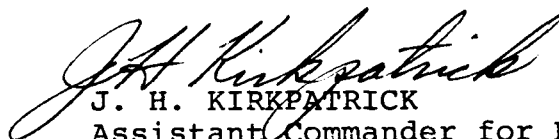
(2) ensure that master source data materials are validated prior to presentation to TM writing groups or to a regional contractor for TM preparation;

(3) coordinate and request QA support for TM's and maintenance requirements cards for IPR's and verifications through NAVAIRTECHSERVFAC;

(4) participate, whenever possible, in guidance conferences, IPR's, and verifications.

e. Type Commander. The type commander will support the TMQAP by coordinating and directing the functional wings and Marine wing/air groups to provide for dedicated equipment and personnel availability to support IPR's, validation/verification functions and fleet verifications of NAVAIR TM's.

8. Action. Cognizant activities will take action, as necessary, to adhere to the policies and responsibilities as specified herein.



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